



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/671,713

09/29/2003

Hirotooshi Fujisawa

SON-2831

9280

23353 7590 09/05/2007
RADER FISHMAN & GRAUER PLLC
LION BUILDING
1233 20TH STREET N.W., SUITE 501
WASHINGTON, DC 20036

EXAMINER

THERIAULT, STEVEN B

ART UNIT

PAPER NUMBER

2179

MAIL DATE

DELIVERY MODE

09/05/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/671,713	Applicant(s) FUJISAWA, HIROTOSHI	
	Examiner Steven B. Theriault	Art Unit 2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07/23/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2179

DETAILED ACTION

1. This action is responsive to the following communications: RCE filed 07/23/2007.
2. Claims 1 -18 are pending in the case. Claims 1 and 3 are the independent claims.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/23/2007 has been entered.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The recording medium recited in claims 18, is not explicitly defined within the specification and lacks antecedent basis in the specification" *so that the meaning of the terms in the claims may be ascertainable by reference to the description*". The present application defines the following:

[0188] In order to conduct a series of processes by software, the programs constituting the software are installed in the computer that is incorporated in dedicated hardware or in the computer, such as a general-purpose personal computer, which is capable of executing various functions by the installation of various programs, over a network or from a storage medium. The claim however recites a recording medium in which the specification does not explicitly recite a recording medium, it recites a storage medium.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1 – 6, 8 – 10, 12- 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizutome et al. (Publication No. 2002/0078447) in view of Santoro et al U.S. Patent No. 6,724,403 issued Apr. 20, 2004.**

As to claim 1, Mizutome et al. teaches:

A display device (see e.g., Fig. 1) that is capable of displaying predetermined display information (see e.g., Para. [0088]; i.e., seven genres are used as predetermined information for displaying on the layout selected by the user) in each of a plurality of display areas (see e.g., Para. [0081] – Para. [0082]; i.e., the user is able to select preset screen layouts for displaying information), the display device comprising: a display unit configured to display said display information (see e.g., Para. [0076]; display 114); a setting unit configured to set display control information that represents the relationship between the display information (see e.g., Para. [0083]; history database storage unit 132 is used to store layouts and genre information); and a display control unit configured to control said display unit to display the display information so as to be displayed in each of the plurality of display areas (see e.g., Para. [0091]; CPU 123 decides which window is used to display each window), based on the display control information set by the setting unit (see e.g., Para. [0091] – Para. [0092]; i.e., the Parameters are extracted by CPU 123 by referring to a register value regarding display control in the graphics accelerator 115)

Mizutome teaches an interrupt that occurs from an e-mail being sent to the display and a popup displays to the user that the event has occurred (see e.g., Fig. 17A – 17C and Para. [0117]; i.e., arrival of an e-mail). However, Mizutome does not teach:

wherein, when the display control unit detects an event ~~corresponding to~~ based upon the content of a predetermined display information displayed in a predetermined area, the display control unit controls said display unit to present the occurrence of the event to the user.[:-]

Art Unit: 2179

Santoro teaches a system that allows multiple sources of information to be displayed simultaneously. Each source is displayed within a tile on the display (See figure 1). Each tile contains data that is refreshed in real time and teaches that in a given tile an alert is given that an email has arrived, and in this case the email client is running in the window and the event that generates the alert comes from the content of the window (See column 8, lines 55-67, column 9, lines 10-25, column 10, lines 25-40 and column 13, lines 7-20). Santoro teaches the grid manages the location of each tile and where each tile can have a variety of sizes and priorities, where higher priority items cover more display area or are refreshed more frequently. Santoro and Mizutome are from the same problem solving area of displaying multiple sources of information simultaneously to a user.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention, having the teachings of Mizutome and Santoro in front of them, to modify the system of Mizutome to include the feature of having the content of the window generate an event. The motivation to combine Santoro with Mizutome comes from the suggestion in Santoro that users require a system that can allow for a variety of up-to-date content to be provided to a flexible interface that allows multiple sources of content to be simultaneously displayed. Further, Santoro teaches a need to have an interface that allows an interface that can display any type of information in a consistent manner from multiple channels where the information is able to be updated continuously.

As to claim 2, Mizutome et al. teaches:

A display device according to claim 1, wherein the display control unit controls said display unit (see e.g., Para. [0078]; i.e., CPU 123 consists of Parameter detecting unit 131 for detecting display Parameter of each window) to switch display area for displaying said predetermined display information (see e.g., Fig. 18A – 18D and Para. [0122] – Para. [0125]; automatically switching display of Fig. 18A to Fig. 18B-18D).

As to claim 3, Mizutome et al. teaches:

Art Unit: 2179

A display device according to claim 1, wherein display control unit controls said display unit (see e.g., Para. [0078]; i.e., CPU 123) to switch the size of said predetermined display area (see e.g., Fig. 17A – 17B and Para. [0117]; i.e., arrival of e-mail switches size of display area).

As to claim 4, Mizutome et al. teaches:

A display device according to claim 1, wherein, the setting unit (see e.g., Para. [0078]) sets information representing the priority of the display information as the display control information (see e.g., Fig. 17 – Fig. 18 and Para. [0079]; history database storage unit 132 is used for storing a user's history, wherein the broadcast show depicted in Fig. 18A has priority over other display information, such as "news headline" and "weather reports"), and wherein, the display control unit controls the display unit (see e.g., Para. [0078]; i.e., CPU 123 consists of Parameter detecting unit 131 for detecting display Parameter of each window) to display the display information as to be displayed in each of the plurality of the display areas (see e.g., Fig. 17 – Fig. 18), based on the information representing the priority (see e.g., Fig. 17 – Fig. 18; i.e., Fig. 18A has priority over "news headline" and "weather reports").

As to claim 5, as indicated in the above discussion, Mizutome in view of Santoro teach every element of claim 1.

Mizutome does not expressly teach where the setting unit sets, as the display control information, the information representing a link that another display device uses to display the display information displayed in the display area. However, this limitation would have been obvious to one of ordinary skill in the art, in view of Santoro, because Santoro shows that multiple display devices can access the system and display the same grid configuration (See figure 27). Santoro shows multiple devices with different display sizes connected to the system

As to claim 6, Mizutome et al. teaches:

A display device according to claim 1, wherein, the display control unit controls said display unit (see e.g., Para. [0078]; i.e., CPU 123 consists of Parameter detecting unit 131 for detecting display Parameter of each window) to display a program in said predetermined display area, as the display information (see e.g., Fig. 22 and Para. [0136] – Para. [0137]; i.e., past viewing and

Art Unit: 2179

listening history defines the layout for Fig. 22, wherein the time frame of 6a.m. and 7a.m. will display "headline news" and the "weather report" on the right side of the display).

As to claim 8, Mizutome et al. teaches:

A display device according to claim 1, wherein the display control unit controls said display unit (see e.g., Para. [0078]; i.e., CPU 123 consists of Parameter detecting unit 131 for detecting display Parameter of each window) to display the information corresponding to e-mail (see e.g., Fig. 17A – 17C and Para. [0117]; i.e., e-mail) in said predetermined display area, as the display information (see e.g., Fig. 17A – 17C Para. [0075] and Para. [0117]; i.e., right side of screen will display e-mail due to user history and predefined layout).

As to claim 9, Mizutome et al. teaches:

A display device according to claim 8, wherein the display control unit detects reception of e-mail as the event (see e.g., Fig. 17A – 17C and Para. [0117]; i.e., arrival of e-mail).

As to claim 10, Mizutome et al. teaches:

A display device according to claim 1, wherein, the display control unit controls said display unit (see e.g., Para. [0078]; i.e., CPU 123 consists of Parameter detecting unit 131 for detecting display Parameter of each window) to display a picture from a camera (see e.g., Para. [0070]; i.e., image data of a digital camera) acquired through Internet (see e.g., Para. [0087]; i.e., Internet) in said predetermined display area, as the display information (see e.g., Para. [0071] – Para. [0075])(See also Santoro column 4, lines 37-55 and column 6, lines 55-60).

As to claim 12, Mizutome et al. teaches:

A display device according to claim 1, wherein, the display control unit controls said display unit (see e.g., Para. [0078]; i.e., CPU 123 consists of Parameter detecting unit 131 for detecting display Parameter of each window) to display a weather information in said predetermined display area, as the display information (see e.g., Fig. 18A – 18D and Para. [0125]; i.e., weather forecast displayed on bottom right corner of display).

As to claim 13, Mizutome et al. teaches a display control unit controls said display unit (see e.g., Para. [0078]; i.e., CPU 123 consists of Parameter detecting unit 131 for detecting display Parameter of each window), and a predetermined display area for displaying information (see e.g., Fig. 17 – Fig. 18 and Para. [0081]; i.e., preset layout for displaying information history), but does not specifically mention displaying information concerning the user's community in said predetermined display area, as the display information. Santoro et al. teaches a grid of tiles used to access information, such as video clips, e-mail messages, television shows, Internet sites, application programs, data files and folders, live video streams, music, radio shows, and any other information stored locally or available through a modem (see e.g., col. 4, lines 34 – 54). Thus, the previously discussed information displayed on the grid, such as Internet sites, would have been obvious to one of ordinary skill in the art to include information concerning the user's community. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporate a display control unit controls said display unit of Mizutome et al. with the displaying of information in tiles of a grid of Santoro et al. because the graphical interface facilitates the organization and management of multiple data sources corresponding to a user's needs and interest (see e.g., col. 4, lines 34 – 37).

As to claim 14, this claim is analyzed with respect to claim 1. Mizutome et al. teaches a display control unit controls (see e.g., Para. [0078]; i.e., CPU 123 consists of Parameter detecting unit 131 for detecting display Parameter of each window), and a predetermined display area for displaying information (see e.g., Fig. 17 – Fig. 18 and Para. [0081]; i.e., preset layout for displaying information history), but does not specifically mention displaying a to-do list in said predetermined display area, as the display information. Santoro et al. teaches displaying a to-do list in said predetermined display area, as the display information (see e.g., Fig. 4 and col. 9, lines 5 – 8; i.e., it is appreciated by one of ordinary skill in the art that a text document can be a to-do list). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the display control unit controls said display unit to display information in a predetermined area of Mizutome et al. with displaying a to-do list in said

Art Unit: 2179

predetermined display area, as the display information of Santoro et al. because the graphical interface facilitates the organization and management of multiple data sources corresponding to a user's needs and interest (see e.g., col. 4, lines 34 –37).

As to claim 15, Mizutome et al. teaches:

A display device according to claim 1, wherein, the display control unit controls said display unit (see e.g., Para. [0078]; i.e., CPU 123 consists of Parameter detecting unit 131 for detecting display Parameter of each window) to display a schedule (see e.g., Para. [0089]; i.e., EPG displaying of scheduler) in said predetermined display area, as the display information (see e.g., Para. [0075]; i.e., predetermined screen layout).

As to claim 16, this claim is analyzed with respect to claim 1 as previously discussed above.

Mizutome et al. teaches a display control unit controls said display unit (see e.g., Para. [0078]; i.e., CPU 123 consists of Parameter detecting unit 131 for detecting display Parameter of each window), and a predetermined display area for displaying information (see e.g., Fig. 17 – Fig. 18 and Para. [0081]; i.e., preset layout for displaying information history), but does not specifically mention displaying an advertisement in said predetermined display area, as the display information. Santoro et al. teaches displaying an advertisement in said predetermined display area, as the display information (see e.g., Fig. 1 and col. 6, lines 39 – 51; i.e., advertisement corresponds to electronic goods for sale displayed in grid 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the display control unit controls said display unit to display information in a predetermined area of Mizutome et al. with displaying an advertisement in said predetermined display area, as the display information of Santoro et al. because the graphical interface facilitates the organization and management of multiple data sources corresponding to a user's needs and interest (see e.g., col. 4, lines 34 –37).

As to claim 17, Mizutome et al. teaches:

A display method of a display device (see e.g., Fig. 1) that is capable of displaying predetermined display information (see e.g., Para. [0088]; i.e., seven genres are used as predetermined information for displaying on the layout selected by the user) in each of a plurality of display areas (see e.g., Fig. 18 and Para. [0081] – Para. [0082]; i.e., the user is able to select preset screen layouts for displaying information) of a display unit (see e.g., Para. [0076]; display 114), the display method comprising the steps of: setting display control information that represents the relationship between the display area and the display information, based on user inputs (see e.g., Para. [0081] and Para. [0083]; history database storage unit 132 is used to store layouts and genre information defined by the user); controlling said display unit to display the display information as to be displayed in each of the plurality of display areas (see e.g., Para. [0091]; CPU 123 decides which window is used to display each window), based on the display control information set in a predetermined area (see e.g., Para. [0091] – Para. [0092]; i.e., the Parameters are extracted by CPU 123 by referring to a register value regarding display control in the graphics accelerator 115); detecting an event (see e.g., Fig. 17A – 17C and Para. [0117]; i.e., arrival of an e-mail) corresponding to a predetermined display information (see e.g., Fig. 17A – 17C and Para. [0117] – Para. [0118]; i.e., history of how user treats interrupts, such as an arrival of an e-mail, corresponds to the predetermined display information) displayed in a predetermined area (see e.g., Fig. 17A – 17C and Para. [0117] – Para. [0118]; i.e., the system automatically opens the e-mail on the right side of the screen after three seconds); and controlling said display unit to switch a display area for displaying said predetermined display information (see e.g., Fig. 17A – 17C and Para. [0117]; i.e., arrival of e-mail will minimize the size of the initial display in order to display the e-mail on the right side of the screen) or the size of said predetermined display area (see e.g., Fig. 17 – Fig. 18), when said event is detected in the detecting step (see e.g., Para. [0117]; i.e., arrival of an e-mail).

Mizutome does not expressly teach:

Detecting an event based on the content of the predetermined display information displayed in the predetermined area.

Art Unit: 2179

Santoro teaches a system that allows multiple sources of information to be displayed simultaneously. Each source is displayed within a tile on the display (See figure 1). Each tile contains data that is refreshed in real time and teaches that in a given tile an alert is given that an email has arrived, and in this case the email client is running in the window and the event that generates the alert comes from the content of the window (See column 8, lines 55-67, column 9, lines 10-25, column 10, lines 25-40 and column 13, lines 7-20). Santoro teaches the grid manages the location of each tile and where each tile can have a variety of sizes and priorities, where higher priority items cover more display area or are refreshed more frequently. Santoro and Mizutome are from the same problem solving area of displaying multiple sources of information simultaneously to a user.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention, having the teachings of Mizutome and Santoro in front of them, to modify the system of Mizutome to include the feature of having the content of the window generate an event. The motivation to combine Santoro with Mizutome comes from the suggestion in Santoro that users require a system that can allow for a variety of up-to-date content to be provided to a flexible interface that allows multiple sources of content to be simultaneously displayed. Further, Santoro teaches a need to have an interface that allows an interface that can display any type of information in a consistent manner from multiple channels where the information is able to be updated continuously.

As to claim 18, Mizutome et al. teaches:

As to claim 18, claim 18 differs from claim 17 only in that claim 18 is an apparatus claim using a recording medium (see e.g., Para. [0079]; i.e., RAM 122) containing a computer-readable program (see e.g., Para. [0184]; i.e., software program) that is executed by a computer (see e.g., Para. [0060]; i.e., CPU 123) to perform the steps of claim 18. Thus, claim 18 is analyzed with respect to claim 17 as previously discussed above.

6. **Claims 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizutome et al. (Publication No. 2002/0078447) in view of Santoro et al U.S. Patent No. 6,724,403 issued Apr. 20, 2004, in further view of Klein et al. (Patent No. 6,064,303).**

As to claim 7, this claim is analyzed with respect to claim 6 as previously discussed above.

Mizutome in view of Santoro teaches a display control unit (see e.g., Para. [0078]; i.e., CPU 123 consists of Parameter detecting unit 131 for detecting display Parameter of each window) and an event (see e.g., Fig. 17A – 17B and Para. [0117]; i.e., arrival of e-mail switches size of display area). Santoro teaches the event is based on the content of the window and can render audio, neither reference specifically mention detecting sound volume exceeding predetermined threshold value in a program, as the event. Klein et al. teaches detecting sound volume exceeding predetermined threshold value in a program, as the event (see e.g., col. 2, lines 41 – 61; i.e., the home security system has environmental input devices that detects a threshold event, such as an abrupt increase in the amplitude of a particular sound frequency). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a display control unit and an event of Mizutome et al. with detecting sound volume exceeding a predetermined threshold value in a program, as the event of Klein et al. because the sound detection security system has the ability of diagnosing the presence of an intruder and informing the police by broadcasting a pre-recorded voice data file that includes the address of the house (see e.g., col. 3, lines 10 – 24).

As to claim 11, this claim is analyzed with respect to claim 10 as previously discussed above.

Mizutome in view of Santoro teaches a display control unit (see e.g., Para. [0078]; i.e., CPU 123 consists of Parameter detecting unit 131 for detecting display Parameter of each window), Santoro teaches the event is based on the content of the window and can render audio, neither reference specifically mention the display control unit detects a person in said picture as an event. Klein et al. teaches the display control unit detects a person in said picture as an event (see e.g., col. 2, lines 42 – 61; i.e., video camera for detecting movement against a normal

Art Unit: 2179

background exceeds a threshold). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the display control unit of Mizutome and Santoro with the display control unit detects a person in said picture as an event of Klein et al. because the sound detection security system has the ability of diagnosing the presence of an intruder and informing the police by broadcasting a pre-recorded voice data file that includes the address of the house (see e.g., col. 3, lines 10 – 24).

It is noted that any citation to specific pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)).

Response to Arguments

7. Applicant's arguments, see arguments/remarks, filed 07/23/2007, with respect to the rejection(s) of claim(s) 1-18 under Mizutome have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Mizutome in view of Santoro.

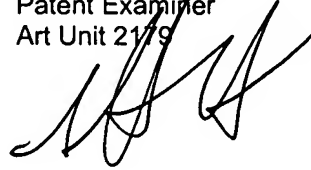
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven B. Theriault whose telephone number is (571) 272-5867. The examiner can normally be reached on M, W, F 10:00AM - 8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2179

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven B Therjault/
Patent Examiner
Art Unit 2179

A handwritten signature in black ink, appearing to read 'S. B. Therjault', is written over the printed name and title.